

Colorado Department of Public Health and Environment

OPERATING PERMIT

Robinson Brick Company

Issued: January 1, 2001

AIR POLLUTION CONTROL DIVISION COLORADO OPERATING PERMIT

FACILITY NAME: Robinson Brick OPERATING PERMIT NUMBER

Company

FACILITY ID: 0311447

ISSUE DATE: January 1, 2001 EXPIRATION DATE: January 1, 2006

MODIFICATIONS: See Appendix F of Permit

Issued in accordance with the provisions of Colorado Air Pollution Prevention and Control Act, 25-7-101 et seq. and applicable rules and regulations.

ISSUED TO: PLANT SITE LOCATION: **Robinson Brick Company**1845 West Dartmouth Avenue **Denver, CO 80110-1308**

Denver, CO 80110-1308 Denver County

INFORMATION RELIED UPON

Operating Permit Application Received: August 6, 1997

And Additional Information Received: August 7, 1998; May 10 and July 28, 1999; May 12 and

July 7, 2000; November 20, 2002

Nature of Business: Brick Manufacturing

Primary SIC: 3251

RESPONSIBLE OFFICIAL

Name: Michael G. Leidich

FACILITY CONTACT PERSON

Name: Michael G. Leidich

Title: Vice President - Mining and Material Title: Vice President - Mining and

Material

97OPDE189

Phone: (303) 783-3047 Phone: (303) 783-3047

SUBMITTAL DEADLINES

Semi-Annual Monitoring Period: January 1 – June 30, July 1 – December 31

Semi-Annual Monitoring Report: August 1, 2001 & February 1, 2002 and subsequent years

Annual Compliance Period: January 1 – December 31

Annual Compliance Certification: February 1, 2002 and subsequent years

NOTE: The Semi-Annual Monitoring reports and the Annual Compliance report must be received at the Division office by 5:00 PM on the due date. Postmarked dates will not be accepted for the purposes of determining the timely receipt of those reports

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SECTION I - General Activities and Summary

1. Permitted Activities

1.1 This facility consists of a brick manufacturing company which falls into the Standard Industrial Classification 3251. Processes include storage and handling of various clay, sand, petroleum-contaminated soil, and reclaim material which includes feeding, crushing, grinding, screening and conveying. A rotary dryer is used when moisture levels are above acceptable standards and a calciner for calcining. After the clay is mixed, molded and cut it is dried and fired in one of two kilns. In addition, there are three (3) metal parts solvent cleaning sinks.

The facility is located in the city and county of Denver. The area in which the plant operates is designated as non-attainment for carbon monoxide and particulate matter smaller than ten (10) microns. Although the Denver metropolitan area was previously designated for nonattainment for the 1-hour ozone standard, this standard was revoked in June of 1998. However, all SIP-approved requirements continue to apply in order to prevent backsliding under the provisions of Section 110(I) of the Federal Clean Air Act. A July 20, 2000, Federal Register (see Fed. Reg. 45182) indicated the 1-hour ozone non-attainment designation will be reinstated on January 16, 2001. In addition, based upon preliminary data, it appears that Denver recently violated the new 8-hour ozone standard and it is the Division's understanding that EPA will issue a non-attainment designation Federal Register notice for the metropolitan area even though the EPA's ability to implement the standard is under judicial review as of the issuance date of this permit.

There are no affected states within 50 miles of the plant. The following Federal Class I designated areas are within 100 kilometers of the plant: Rocky Mountain National Park.

- 1.2 Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air pollutants from this facility in accordance with the requirements, limitations, and conditions of this permit.
- 1.3 This Operating Permit incorporates the applicable requirements contained in the underlying construction permits, and does not affect those applicable requirements, except as modified during review of the application or as modified subsequent to permit issuance using the modification procedures found in Colorado Regulation No. 3, Part C. These Part C procedures meet all applicable substantive New Source review requirements of Part B. Any revisions made using the provisions of Colorado Regulation No 3, Part C shall become new applicable requirements for purposes of this operating permit and shall survive reissuance. This permit incorporates the applicable requirements (except as noted in Section II) from the following construction permits: 93DE557 and 97DE0739.
- 1.4 All conditions in this permit are enforceable by US Environmental Protection Agency, Colorado Air Pollution Control Division (hereinafter Division) and its agents, and citizens unless

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otherwise specified. **State-only enforceable conditions are:** Section IV - Condition 14 and Condition 18 (as noted).

- 1.5 All information gathered pursuant to the requirements of this permit is subject to the Record keeping and Reporting requirements listed under Condition 22 of the General Conditions in Section IV of this permit, unless otherwise specified.
- 1.6 There are no other Operating Permits associated with this facility for purposes of determining applicability of Prevention of Significant Deterioration regulations.

2. Alternative Operating Scenarios

- 2.1 The permittee shall be allowed to make the following changes to its method of operation without applying for a revision of this permit.
 - 2.1.1 No separate operating scenarios have been specified.

3. Accidental Release Prevention Program (112(r))

3.1 This facility is not subject to the provisions of the Accidental Release Prevention Program (section 112(r) of the Federal Clean Air Act).

4. Prevention of Significant Deterioration

4.1 This source is an existing major stationary source for carbon monoxide and particulate matter smaller than ten microns (10F) with respect to New Source Review (NSR)/Prevention of Significant Deterioration (PSD) requirements of Colorado Regulation No 3, Part B, Section IV.D.2. Future modifications at this facility above the significant level thresholds may trigger NSR/PSD requirements.

5. Compliance Schedule

5.1 The following compliance schedule is incorporated as necessary to achieve compliance with the applicable requirements detailed in this Operating Permit.

The Special Environmental Project (SEP) shall be completed by September 30, 2000. The SEP completion reports shall be submitted to the Division by October 31, 2000.

6. Summary of Emission Units

6.1 The emissions units regulated by this permit are the following:

Emission Unit Number	AIRS Stack Number	Facility Identifier	Description	Pollution Control Device
F001, F005	NA	F001, F005	Fugitive Particulate Emissions From Loader to Feeder, Storage Piles and Unpaved Roads.	Watering as Needed
F002	NA	F002	Primary Crusher, Design Rated at 90 dry tons/hr.	Uncontrolled
F003	NA	F003	Grinding and Screening Operations Located in an Enclosed Building, Design Rated at 90 dry tons/hr.	Building Enclosure
F004	NA	F004	Partially Enclosed Conveyor, Design Rated at 90 dry tons/hr.	Partial Building Enclosure
S001	NA	P001	Rotary Dryer, Maximum Design Rate 20 MMBtu/hr with Wet Dust Collector, Natural Gas Fired.	American Air Filter Company, Type R Roto-Clone Wet Centrifugal Dust Collector
S002-S005	001	P002-P005	Two Tunnel Dryers and Two Kilns	Uncontrolled
S006	NA	P006	Rotary Calciner with wet dust collector, maximum design rate of 25 MMBtu/hr.	American Air Filter Company, Type R Roto-Clone Wet Centrifugal Dust Collector
M007	002	F007	Metal parts solvent cleaner tanks	Uncontrolled

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SECTION II - Specific Permit Terms

1. F001/F005 - Fugitive Particulate Emissions

Loader to Feeder, Storage Piles and Unpaved Roads

Parameter	Permit	Limitations	Emission Factor	Monitoring	
	Condition Number			Method	Interval
PM and PM ₁₀ Emissions	1.1	NA	NA	Calculation and Record keeping	Annually
Control Measures	1.2	NA	NA	Record keeping	As Needed

- 1.1 The source shall certify annually that they are in compliance with the requirements for submitting revised APENs for these fugitive particulate emissions (Colorado Regulation No. 3, Part C, Section II.C.)
- 1.2 The permittee shall employ the control measures and operating procedures below as necessary to minimize fugitive particulate emissions (Colorado Regulation No. 1, Section III.D). The permittee shall certify annually that all appropriate measures have been taken to minimize fugitive emissions. All policy and procedure manuals that specify fugitive particulate control measures shall be made available to the Division upon request.
 - 1.2.1 The unpaved roads are subject to the control measures and operating procedures of Colorado Regulation No. 1, Section III.D.2.a.
 - 1.2.2 The paved areas of the road(s) and parking lot(s) shall be swept with a power sweeper and/or washed with a water truck as necessary to minimize dirt buildup or dust.

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2. F002 - Primary Crusher (90 dry tons/hr)

Parameter	Permit	Limitations		Emission Factor	Monit	oring
	Condition Number	Short Term	Long Term		Method	Interval
PM and PM ₁₀ Emissions	2.1	NA	NA	PM: 0.169 lb/dry tons processed PM10: 0.059 lb/ dry tons processed	Calculation and Record keeping	Annually
PM	2.2	35.56 lb/hr	NA	NA	Calculation	
Raw Material Process Rate	2.2	NA	NA	NA	Record keeping	
Opacity	2.4	Not to exceed 20%		NA	Visual Observations and EPA Method 9	Daily

2.1 Emissions shall be calculated annually using the listed compliance emission factors (EF) in the following equation:

Tons/yr = EF (lb/dry ton) x Throughput (dry ton/yr) x 1/2000 (Ton/lb)

Calculations must be performed for each calendar year to determine if a revised APEN needs to be submitted. Copies of the calculations shall be kept on file and made available to the Division for review upon request.

- 2.2 Particulate Matter emissions shall not exceed 35.56 lbs/hr as calculated from the equation $PE = 17.31(P)^{0.16} = lbs/hr$, where P = Process Weight Rate in dry tons per hour (Colorado Regulation No. 1, Section III.C.1.b). In the absence of any credible evidence to the contrary, compliance with the particulate standard shall be monitored by calculation.
- 2.3 Throughput of raw materials to the crusher shall be recorded annually to use in the calculations in Condition 2.1.
- 2.4 Opacity of emissions shall not exceed 20% (Colorado Construction Permit 93DE557). Compliance with the opacity requirements shall be monitored by conducting daily visual observations, not Method 9, during operation. If visible emissions persist for longer than six (6) consecutive minutes, the permittee shall investigate the equipment performance and make any adjustments necessary. After the maintenance or adjustments have been performed the visible emissions shall again be observed. If the visible emissions persist for longer than six (6) consecutive

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minutes after maintenance or adjustments have been performed, an EPA Reference Method 9 opacity observation shall be performed to monitor compliance with the opacity standard. The result(s) of the non-Method 9 visual observations and the Method 9 observations shall be kept on file and made available for Division review upon request.

The EPA Reference Method 9 opacity observations shall be performed by an observer with a current and valid Method 9 certification. A clear and readable copy of the observer's certificate and any opacity observations shall be kept on file and made available to the Division for review upon request.

If any of the opacity observations exceed the applicable standard, additional observations must be performed. In the absence of credible evidence to the contrary, exceedance of the limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit.

3. F003 - Grinding and Screening Operations (90 dry tons/hr)

Parameter	Permit	Limit	Limitations		Monitoring	
	Condition Number	Short Term	Long Term	Emission Factor	Method	Interval
PM	3.1 3.4	0.05 g/dscm	74.8 tons/yr	0.425 lb/dry tons processed	Record keeping, Calculation and	Monthly, As Noted
PM ₁₀		NA	4.7 tons/yr	0.0265 lb/dry tons processed	Performance Test	
Raw Material Process Rate	3.2	NA	352,000 tons/yr	NA	Record keeping, 12 month rolling total	Monthly
Opacity	3.5	Not to exceed 20%		NA	Visual	Daily
	3.3	or vent and	7% from a stack I no visible m the building		observations and EPA Method 9	

3.1 Emissions of air pollutants shall not exceed the limitations stated above established directly in this Operating Permit under the provisions of Section I, Condition 1.3. Monthly emissions from each source shall be calculated and recorded within thirty (30) days of the end of the month using the appropriate emission factors listed above and the monthly process rate.

A performance test to determine compliance with the particulate standard of 0.05 g/dscm shall be conducted within the last 18 months of the 5 year permit term in accordance with EPA Reference Methods 5 or 17 and 40 CFR Part 60 §60.675. Tests shall be conducted using a protocol approved by the Division. The protocol shall be submitted at least 30 days prior to any testing required under this condition. All performance tests shall be witnessed by Division personnel, at the Division's discretion.

- 3.2 The processing of raw material shall not exceed the limitations stated above established directly in this Operating Permit under the provisions of Section I, Condition 1.3. The monthly process rate shall be measured and recorded to be used in a rolling twelve month total to compare with annual limitations. A new twelve month total shall be calculated within thirty (30) days of the end of the month using the previous twelve months data. Compliance shall be determined and the calculations and compliance determinations kept on file for Division review upon request.
- 3.3 Opacity of emissions shall not exceed 7% (Colorado Regulation No. 6, Part A, Subpart OOO). Compliance with the opacity requirements shall be monitored by conducting daily visual observations, not Method 9, during operation. If visible emissions persist for longer than six (6) consecutive minutes, the permittee shall investigate the equipment performance and make any

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adjustments necessary. After the maintenance or adjustments have been performed the visible emissions shall again be observed. If the visible emissions persist for longer than six (6) consecutive minutes after maintenance or adjustments have been performed, an EPA Reference Method 9 opacity observation shall be performed to monitor compliance with the opacity standard. The result(s) of the non-Method 9 visual observations and the Method 9 observations shall be kept on file and made available for Division review upon request.

The EPA Reference Method 9 opacity observations shall be performed by an observer with a current and valid Method 9 certification. A clear and readable copy of the observer's certificate and any opacity observations shall be kept on file and made available to the Division for review upon request.

If any of the opacity observations exceed the applicable standard, additional observations must be performed. In the absence of credible evidence to the contrary, exceedance of the limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit.

While operating, this unit is subject to the requirements of 40 CFR 60 Subpart OOO (as adopted by reference in Colorado Regulation No. 6, Part A, Subpart OOO), Standards of Performance for Nonmetallic Mineral Processing Plants including but not limited to the following:

- 3.3.1 Standards for particulate matter (§60.672).
 - 3.3.1.1 No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any stack emissions which contain particulate matter in excess of 0.05 g/dscm (§60.672(a)(1).
 - 3.3.1.2 No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any stack emissions which exhibit greater than seven percent (7%) opacity (§60.672(a)(2)).
 - 3.3.1.3 No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in §60.671 (§60.672(e)(1)).
 - 3.3.1.4 No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emission limits in Conditions 3.3.1.1 and 3.3.1.2
- 3.3.2 Monitoring of emissions and operations (§60.674).

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- 3.3.3 Test methods and procedures (§60.675).
- 3.3.4 Record keeping and reporting requirements (§60.676).
- 3.4 This source is subject to all NSPS requirements of Colorado Regulation No. 6, Part A, Subpart A, General Provisions (Federal 40 CFR 60.1 through 60.19). Including but not limited to the following:
 - 3.4.1 No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gasses discharged to the atmosphere. (§60.12)
 - 3.4.2 Records of startups, shutdowns, and malfunctions shall be maintained, as required under §60.7.
 - 3.4.3 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (40 CFR §60.11 (d))
- 3.5 The opacity shall not exceed 20% in accordance with Colorado Regulation No. 1, Part II.A.1.

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4.

F004 - Conveyor (90 dry tons/hr)

Parameter	Permit	Limitations		Compliance Emission	Monitoring	
	Condition Number	Short Term	Long Term	Factor	Method	Interval
PM and PM ₁₀ Emissions	4.1	NA	NA	PM: 6.13E-04 lb/dry tons processed PM10: 2.9E-04 lb/dry tons processed	Calculation and Record keeping	Annually
PM	4.2	35.56 lb/hr	NA	NA	Calculation	Annually
Raw Material Process Rate	4.2	NA	NA	NA	Record keeping	Annually
Opacity	4.4	Not to ex	sceed 20%	NA	Visual Observations & EPA Method 9	Daily

4.1 Emissions shall be calculated annually using the listed compliance emission factors (EF) in the following equation:

Tons/yr = EF (lb/dry ton) x Throughput (dry ton/yr) x 1/2000 (Ton/lb)

Calculations must be performed for each calendar year to determine if a revised APEN needs to be submitted. Copies of the calculations shall be kept on file and made available to the Division for review upon request.

- 4.2 Particulate Matter emissions shall not exceed 35.56 lbs/hr as calculated from the equation $PE = 17.31(P)^{0.16} = lbs/hr$, where P = Process Weight Rate in dry tons per hour (Colorado Regulation No. 1, Section III.C.1.b). In the absence of any credible evidence to the contrary, compliance with the particulate standard shall be monitored by calculation
- 4.3 Throughput of dry weight of raw materials to the conveyor shall be recorded annually to use in the calculations in Condition 4.1.
- 4.4 Opacity of emissions shall not exceed 20% (Colorado Construction Permit 93DE557). Compliance with the opacity requirements shall be monitored by conducting daily visual observations, not Method 9, during operation. If visible emissions persist for longer than six (6) consecutive minutes, the permittee shall investigate the equipment performance and make any adjustments necessary. After the maintenance or adjustments have been performed the visible emissions shall again be observed. If the visible emissions persist for longer than six (6) consecutive minutes after maintenance or adjustments have been performed, an EPA Reference Method 9 opacity observation shall be performed to monitor compliance with the opacity standard. The result(s) of the

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non-Method 9 visual observations and the Method 9 observations shall be kept on file and made available for Division review upon request.

The EPA Reference Method 9 opacity observations shall be performed by an observer with a current and valid Method 9 certification. A clear and readable copy of the observer's certificate and any opacity observations shall be kept on file and made available to the Division for review upon request.

If any of the opacity observations exceed the applicable standard, additional observations must be performed. In the absence of credible evidence to the contrary, exceedance of the limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit.

5. S001 - Rotary Dryer Natural Gas Fired (20 MMBtu/hr)

Parameter	Permit	Limitations		Compliance	Monitorin	Monitoring	
	Condition Number	Short Term	Long Term	Emission Factor	Method	Interval	
PM PM ₁₀ NOx CO VOC	5.1	NA	NA	0.65 lb/dry ton 0.16 lb/dry ton 100 lb/MMscf 84 lb/MMscf 5.5 lb/MMscf	Record keeping and Calculation	Annually	
PM	5.2	30.59 lb/hr	NA	NA	Control Equipment Maintenance	Monthly	
Natural Gas Usage	5.3	NA	NA	NA	Record keeping	Annually	
Process Rate		NA	NA	NA	Record keeping	Annually	
Opacity	5.2	Not to ex	ceed 20%	NA	Visual observations and EPA Method 9	Daily	

5.1 Emissions shall be calculated annually using the listed compliance emission factors (EF) in the following equations:

Tons/vr = EF (lb/dry ton) x Throughput (dry tons/vr) x 1/2000 (Ton/lb)

Tons/yr = EF (lb/MMscf) x Natural Gas Usage (MMscf/yr) x 1/2000 (Ton/lb)

Calculations must be performed for each calendar year to determine if a revised APEN needs to be submitted. Copies of the calculations shall be kept on file and made available to the Division for review upon request.

5.2 Opacity of emissions from shall not exceed 20% (Colorado Regulation No. 1, Section A.II.1).

Particulate Matter emissions shall not exceed 30.59 lbs/hr as calculated from the equation PE = $17.31(P)^{0.16} = lbs/hr$, where P = Process Weight Rate in dry tons per hour (Colorado Regulation No. 1, Section III.C.1.b). Compliance with the particulate standard shall be calculated annually. The calculations shall be kept on file and made available for Division review upon request.

In the absence of any credible evidence to the contrary compliance with the particulate standard shall be monitored by the control equipment maintenance. Routine maintenance of the wet dust collector shall be conducted in accordance with manufacturer's specifications and in a manner consistent with

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good engineering practices for minimizing emissions. The manufacturer's specifications shall be in written format, and shall be made available to the Division upon request. A visual observation, not a Method 9 observation, of each stack shall be conducted daily to document any fluctuations in performance and for prioritization of preventive maintenance activities. If visible emissions, other than steam, persist for longer than six (6) consecutive minutes, the permittee shall follow the steps in Conditions 5.2.1. through 5.2.3 and record in a log the non-Method 9 visual observations, any action taken as a result of the observations, and Method 9 observations. Should the pressure drop or water supply rate for the wet dust collector be observed outside manufacturer's specifications, the source shall follow the steps in Conditions 5.2.1., 5.2.4., and 5.2.5.

- 5.2.1 Verify that the process and control equipment are operating properly.
- 5.2.2 Perform any maintenance or adjustments needed to minimize visible emissions and ensure that the process and control equipment are operating properly.
- 5.2.3 After the maintenance or adjustments have been performed the visible emissions shall again be observed. If the visible emissions persist for longer than six (6) consecutive minutes after maintenance or adjustments have been performed, an EPA Reference Method 9 opacity observation shall be performed. The result(s) of the non-Method 9 visual observations and the Method 9 observations shall be kept on file and made available for Division review upon request.

The EPA Reference Method 9 opacity observations shall be performed by an observer with a current and valid Method 9 certification. A clear and readable copy of the observer's certificate and any opacity observations shall be kept on file and made available to the Division for review upon request.

If any of the opacity observations exceed the applicable standard, additional observations must be performed. Consecutive observations shall be performed until two consecutive observations are in compliance with the standard.

- 5.2.4 Perform any maintenance or adjustments needed on the control equipment.
- 5.2.5 If the pressure drop remains outside the manufacturer's specifications, the dust collector shall be internally inspected for overall mechanical integrity. Necessary repairs shall be made prior to bringing the equipment back on line. Any action taken as a result of control equipment pressure drop shall be recorded in a daily log.
- 5.3 Natural gas usage and the throughput of dry raw materials shall be recorded annually to use in the calculations in Condition 5.1. A procedure for estimating the dry raw material throughput and the natural gas use shall be developed and submitted for Division approval within six (6) calendar

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months of the issue date of this Operating Permit. The approved procedure shall be kept on file and made available for Division review upon request.

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6. S002-S005 - Two Tunnel Dryers and Two Kilns

Parameter	Permit	Limitations		Compliance	Monitoring	
	Condition Number	Short Term	Long Term	Emission Factor	Method	Interval
PM	6.1 6.3	16.2 lb/hr per kiln	152.60 tons/yr	0.96 lb/ton brick produced	Record keeping and Calculation	Monthly
PM_{10}	6.1	NA	130.80 tons/yr	0.87 lb/ton brick produced	12 month rolling total	
SO_2		NA	66.67 tons/yr	0.67 lb/ton brick produced		
NOx		NA	65.40 tons/yr	0.35 lb/ton brick produced		
VOC		NA	43.37 tons/yr	0.054 lb/ton brick produced		
СО		NA	119.90 tons/yr	1.2 lb/ton brick produced		
Fluorides		NA	58.71 tons/yr	0.59 lb/ton brick produced		
Production of Bricks	6.2	NA	199,000 tons brick/yr	NA		Monthly
Fuel Use	6.4	NA	Natural Gas: 938 MMscf/yr Propane: 6,880 Mgal/yr	NA	Fuel Meters 12 month rolling total	Monthly
Contaminated Soils	6.5	≤ 90,000 ppm	TPH ≤ 40 tons per year	NA	Record keeping 12 month rolling total EPA Approved Test Methods	Monthly
Opacity	6.6	Not to	exceed 20%	NA	Visual Observations and EPA Method 9	Daily

6.1 Emissions of air pollutants shall not exceed the limitations stated above (Colorado Construction Permit 93DE557 as modified under the provisions of Section I, Condition 1.3.). The production and emissions for the calendar month and the 12 month rolling total for the previous 12 calendar months shall be determined and the compliance evaluated within thirty (30) days of the end

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of the month. Records of the calculations and the compliance determinations shall be maintained and made available for Division review upon request.

- 6.2 The production of bricks shall not exceed the limitations stated above (Colorado Construction Permit 93DE557 Condition 5 as modified under the provisions of Section I, Condition 1.3)
- 6.3 Particulate Matter emissions shall not exceed 16.2 pounds per hour per kiln as calculated from the equation $PE = 3.59(P)^{0.62} = lbs/hr$, where P = Process Weight Rate in tons per hour (Colorado Regulation No. 1, Section III.C.1.a). In the absence of any credible evidence to the contrary, compliance with the particulate standard shall be monitored by compliance with Condition 6.1 of this Operating Permit.
- 6.4 The fuel use of natural gas and propane shall not exceed the limitations above (Colorado Construction Permit 93DE557 as modified under the provisions of Section I, Condition 1.3.). Within the first seven days of every month, the fuel meter shall be read and recorded. A twelve month rolling total shall be maintained for monitoring compliance with the annual limitations. Within thirty (30) days of the end of the month a new twelve month total shall be calculated using the previous twelve months data and compliance determined. Records of the calculation and compliance determinations shall be maintained and made available for Division review upon request.
- 6.5 Volatile organic compounds (VOC) concentration in the soil received shall not exceed 90,000 ppm and 40 tons per year of total petroleum hydrocarbon (TPH). The quantity of each shipment of contaminated soil received each month shall be recorded. Each contaminated soil shipment received by the source must be sampled and tested for TPH using an EPA or Division approved method. The VOC levels shall be equal to the TPH levels in the soil and shall be compared with the ppm limitation to monitor compliance. A twelve month rolling total of TPH shall be maintained for monitoring compliance with the annual limitations. The TPH for the calendar month and the 12 month rolling total for the previous 12 calendar months shall be determined and the compliance evaluated within thirty (30) days of the end of the month. Records of the calculations and the compliance determinations shall be maintained and made available for Division review upon request.
- 6.6 Opacity of emissions shall not exceed 20% (Colorado Construction Permit 93DE557). Compliance with the opacity requirements shall be monitored by conducting daily visual observations, not Method 9, during operation. If visible emissions persist for longer than six (6) consecutive minutes, the permittee shall investigate the equipment performance and make any adjustments necessary. After the maintenance or adjustments have been performed the visible emissions shall again be observed. If the visible emissions persist for longer than six (6) consecutive minutes after maintenance or adjustments have been performed, an EPA Reference Method 9 opacity observation shall be performed to monitor compliance with the opacity standard. The result(s) of the

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non-Method 9 visual observations and the Method 9 observations shall be kept on file and made available for Division review upon request.

The EPA Reference Method 9 opacity observations shall be performed by an observer with a current and valid Method 9 certification. A clear and readable copy of the observer's certificate and any opacity observations shall be kept on file and made available to the Division for review upon request.

If any of the opacity observations exceed the applicable standard, additional observations must be performed. In the absence of credible evidence to the contrary, exceedance of the limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit.

6.7 In order to monitor compliance with the hazardous air pollutant reporting requirements of Colorado Regulation No. 3, records of the actual amounts of hazardous air pollutants contained in the contaminated soil received shall be maintained for each calendar month and calendar year. The records shall be made available to the Division for review upon request. (Construction Permit 93DE557 Condition 10)

7. S006 - Rotary Calciner Natural Gas Fired (25 MMBtu/hr)

Parameter			Limitations		Monitoring	
	Condition Number	Short Term	Long Term	Emission Factor	Method	Interval
PM PM ₁₀ NOx CO	7.1	NA	NA	1.2 lb/dry ton 0.3 lb/dry ton 100 lb/MMscf 84 lb/MMscf	Record keeping and Calculation	Annually
PM	7.2	14.97 lb/hr	NA	NA	Control Equipment Maintenance	As Noted
Natural Gas Usage	7.3	NA	NA	NA	Record keeping	Annually
Process Rate		NA	NA	NA	Record keeping	Annually
Opacity	7.2	Not to ex	ceed 20%	NA	Visual observations and EPA Method 9	Daily

7.1 Emissions shall be calculated annually using the listed compliance emission factors (EF) in the following equation:

Tons/yr = EF (lb/MMscf) x Natural Gas Usage (MMscf/yr) x 1/2000 (Ton/lb)

7.2 Opacity of emissions shall not exceed 20% (Colorado Regulation No. 1, Section A.II.1). Particulate Matter emissions shall not exceed 14.97 lbs/hr as calculated from the equation $PE = 3.59(P)^{0.62} = lbs/hr$, where P = Process Weight Rate in dry tons per hour produced (Colorado Regulation No. 1, Section III.C.1.a). Compliance with the particulate standard shall be monitored by the control equipment maintenance as follows:

Routine maintenance of the wet dust collector shall be conducted in accordance with manufacturer's specifications and in a manner consistent with good air pollution control practice for minimizing emissions. These specifications shall be in written format, and shall be made available to the Division upon request. A visual observation, not Method 9, of each stack shall be conducted daily to document any fluctuations in performance and for prioritization of preventive maintenance activities. If visible emissions, other than steam, persist for longer than six (6) consecutive minutes, the permittee shall follow the steps in Conditions 7.2.1. through 7.2.3 and record in a log the opacity observations and any action taken as a result of the observations. Should the pressure drop or water supply rate for the wet dust collector be observed outside manufacturer's specifications, the permittee shall follow the steps in Conditions 7.2.1., 7.2.4., and 7.2.5.

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- 7.2.1 Verify that the process and control equipment are operating properly.
- 7.2.2 Perform any maintenance or adjustments needed to minimize visible emissions and ensure that the process and control equipment are operating properly.
- 7.2.3 After the maintenance or adjustments have been performed the visible emissions shall again be observed. If the visible emissions persist for longer than six (6) consecutive minutes after maintenance or adjustments have been performed, an EPA Reference Method 9 opacity observation shall be performed. The result(s) of the non-Method 9 visual observations and the Method 9 observations shall be kept on file and made available for Division review upon request.

The EPA Reference Method 9 opacity observations shall be performed by an observer with a current and valid Method 9 certification. A clear and readable copy of the observer's certificate and any opacity observations shall be kept on file and made available to the Division for review upon request.

If any of the opacity observations exceed the applicable standard, additional observations must be performed. In the absence of credible evidence to the contrary, exceedance of the limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit.

- 7.2.4 Perform any maintenance or adjustments needed on the control equipment.
- 7.2.5 If the pressure drop remains outside the manufacturer's specifications, the dust collector shall be internally inspected for overall mechanical efficiency. Necessary repairs shall be made prior to bringing the equipment back on line. Any action taken as a result of control equipment pressure drop shall be recorded in a daily log.
- 7.3 The natural gas usage and throughput of dry raw materials shall be recorded for each calendar year for use in the calculations in Condition 7.1.

8. M004 - Cold Cleaner Solvent Vats

Parameter	Permit Condition Number	Limitations	Emission Factors	Monitoring	
				Method	Interval
VOC	8.5	1.7 TPY		Record keeping and calculation	Annual
Solvent consumption		2000 gallons per year			
Work Practice Standards	8.1			Certification	Annual
	8.2				
Transfer and Storage of Waste/Used Solvents	8.3				

- 8.1 Operation of the cold cleaner solvent vats shall meet the following standards (Colorado Regulation No. 7 Section X.B.)
 - 8.1.1 Control of Solvent Cold-Cleaners
 - 8.1.1.1 Control Equipment
 - a. Covers
 - (i) All cold-cleaners shall have a properly fitting cover.
 - (ii) Covers shall be designed to be easily operable with one hand under any of the following conditions:
 - A) Solvent true vapor pressure is greater than 15 torr (0.3 psia) at 38EC (100EF).
 - B) The solvent is agitated by an agitating mechanism.
 - C) The solvent is heated.
 - b. Drainage Facility
 - (i) All cold-cleaners shall have a drainage facility that captures the drained liquid solvent from the cleaned parts.
 - (ii) For cold-cleaners using solvent which has a vapor pressure greater than 32 torr (0.62 psia) measured at 38 °C (100 °F) either:
 - A) There shall be an internal drainage facility within the confines of the cold-cleaner, so that parts are enclosed

- under the (closed) cover to drain after cleaning, or if such a facility will not fit within;
- B) An enclosed, external drainage facility that captures the drained solvent liquid from the cleaned parts.
- c. A permanent, clearly visible sign shall be mounted on or next to the cold-cleaner. The sign shall list the operating requirements.
- d. Solvent spray apparatus shall not have a splashing, fine atomizing, or shower type action but rather should produce a solid, cohesive stream. Solvent spray shall be used at a pressure that does not cause excessive splashing.

For solvents with a true vapor pressure above 32 torr (0.62 psia) at 38EC (100E F), or, for solvents heated above 50EC(120EF), one of the following techniques shall be used:

- (i) a freeboard ratio greater than or equal to 0.7.
- (ii) a water or a non-volatile liquid cover. The cover liquid shall not be soluble in the solvent and shall not be more dense than the solvent and the depth of the cover liquid shall be sufficient to prevent the escape of solvent vapors.

8.1.2 Operating requirements

- 8.1.2.1 The cold-cleaner cover shall be closed whenever parts are not being handled within the cleaner confines.
- 8.1.2.2 Cleaned parts shall be drained for at least 15 seconds and/or until dripping ceases. Any pools of solvent shall be tipped out on the clean part back into the tank.
- 8.2 In the absence of credible evidence to the contrary, compliance with these requirements is ensured by the Responsible Official certifying annually that these units meet the following requirements for small remote reservoir cold solvent degreasers (Colorado Regulation No.3, Part A, Section II.D.4.b.(vi)):
 - 8.2.1 The solvent return opening shall be no larger than 15.5 square inches (100 square centimeters),
 - 8.2.2 The used solvent shall drain into a separate solvent sink which is not accessible for soaking workloads,

- 8.2.3 The solvent used shall have a boiling point greater than 248 °F (120 °C),
- 8.2.4 The emissions from the small remote reservoir degreaser shall not exceed 350 pounds of VOC per year,
- 8.2.5 The temperature of the solvent as used shall be 180 °F (100 °C) below the solvent boiling point, and
- 8.2.6 The solvent used shall not be subject to any state or federal Maximum Achievable Control Technology (MACT) or Generally Available Control Technology (GACT) standards.
- 8.3 The transfer and storage of waste and used solvents from the cold cleaner solvent vats are subject to the following requirements (Colorado Regulation No. 7, Section X.A.3 and 4):
 - 8.3.1 In any disposal or transfer of waste or used solvent, at least 80 percent by weight of the solvent/waste liquid shall be retained (i.e., no more than 20 percent of the liquid solvent/solute mixture shall evaporate or otherwise be lost during transfers).
 - 8.3.2 Waste or used solvent shall be stored in closed containers unless otherwise required by law.
- 8.4 APEN exemptions taken on emissions units under this Condition do not affect the applicability of the regulations to the source.
- 8.5 The solvent consumption and emission limit were set by Condition 3 of Construction Permit 97DE0739.

9. VOC Fugitive Emission Control

Fugitive emissions shall be controlled by the following practices as required by Condition 7 of Construction Permit 97DE0739:

- 9.1 Control techniques and work practices shall be implemented at all times to reduce volatile organic compound (VOC) emissions from fugitive sources. Control techniques and work practices include, but are not limited to:
 - (i) tight-fitting covers for open tanks;
 - (ii) covered containers for solvent wiping cloths;
 - (iii) proper disposal of dirty clean-up solvent.

9.2 Emissions of organic material released during clean-up operations, disposal, and other fugitive emissions shall be included when determining total emissions, unless the source owner or operator documents that the VOC emissions are collected and disposed of in a manner that prevents evaporation to the atmosphere.

10. Substitution for Manufacturer's Recommendations

Some of the terms and conditions of this permit require operation of a source in accordance with the manufacturer's recommendations. In the event the manufacturer's recommendations are no longer available, the permittee shall develop a written document to be submitted for Division approval within 180 calendar days of issuance of this permit. The document should identify the operations and procedures developed, in accordance with good engineering practices to minimize emissions, that must be followed to ensure that the source is maintained and operated properly to minimize emissions. The document shall be kept on-site and made available to the Division for review upon request.

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SECTION III - Permit Shield

Regulation No. 3, 5 CCR 1001-5, Part A, § I.B.43; Part C, §§ V.C.1.b. & D., XIII; §§ 25-7-111(2)(I), 25-7-114.4(3)(a), C.R.S.

1. Specific Non-Applicable Requirements

Based upon information available to the Division and supplied by the applicant, the following parameters and requirements have been specifically identified as non-applicable to the facility to which this permit has been issued. This shield does not protect the source from any violations that occurred prior to or at the time of permit issuance. In addition, this shield does not protect the source from any violations that occur as a result of any modifications or reconstruction on which construction commenced prior to permit issuance.

No permit shield has been granted.

2. General Conditions

Compliance with this Operating Permit shall be deemed compliance with all applicable requirements specifically identified in the permit and other requirements specifically identified in the permit as not applicable to the source. This permit shield shall not alter or affect the following:

- 2.1 The provisions of §§ 25-7-112 and 25-7-113, C.R.S., or § 303 of the federal act, concerning enforcement in cases of emergency;
- 2.2 The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- 2.3 The applicable requirements of the federal Acid Rain Program, consistent with § 408(a) of the federal act;
- 2.4 The ability of the Air Pollution Control Division to obtain information from a source pursuant to § 25-7-111(2)(I), C.R.S., or the ability of the Administrator to obtain information pursuant to § 114 of the federal act;
- 2.5 The ability of the Air Pollution Control Division to reopen the Operating Permit for cause pursuant to Regulation No. 3, Part C, § XIII.
- 2.6 Sources are not shielded from terms and conditions that become applicable to the source subsequent to permit issuance.

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3. Streamlined Conditions

The following applicable requirements have been subsumed within this operating permit using the pertinent streamlining procedures approved by the U.S. EPA. For purposes of the permit shield, compliance with the listed permit conditions will also serve as a compliance demonstration for purposes of the associated subsumed requirements.

Permit Condition	Streamlined (Subsumed) Requirements
NONE	

SECTION IV - General Permit Conditions (Ver 11/14//02)

1. Administrative Changes

Regulation No. 3, 5 CCR 1001-5, Part A, III.

The permittee shall submit an application for an administrative permit amendment to the Division for those permit changes that are described in Regulation No. 3, Part A, § I.B.36.a. The permittee may immediately make the change upon submission of the application to the Division.

2. Certification Requirements

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.9., V.C.16.a.&e. and V.C.17.

- a. Any application, report, document and compliance certification submitted to the Air Pollution Control Division pursuant to Regulation No. 3 or the Operating Permit shall contain a certification by a responsible official of the truth, accuracy and completeness of such form, report or certification stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- b. All compliance certifications for terms and conditions in the Operating Permit shall be submitted to the Air Pollution Control Division at least annually unless the Division in the Operating Permit specifies in the applicable requirement or a more frequent period.
- c. Compliance certifications shall contain:
 - i) the identification of each permit term and condition that is the basis of the certification;
 - ii) the compliance status of the source;
 - iii) whether compliance was continuous or intermittent;
 - iv) the method(s) used for determining the compliance status of the source, currently and over the reporting period; and
 - v) such other facts as the Air Pollution Control Division may require to determine the compliance status of the source.
- d. All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit.
- e. If the permittee is required to develop and register a risk management plan pursuant to § 112(r) of the federal act, the permittee shall certify its compliance with that requirement; the Operating Permit shall not incorporate the contents of the risk management plan as a permit term or condition.

3. Common Provisions

Common Provisions Regulation, 5 CCR 1001-2 §§ II.A., II.B., II.C., II, E., II.F., II.I, and II.J

a. To Control Emissions Leaving Colorado

Operating Permit Number: 97OPDE189 Issued: January 1, 2001 Last Revised: January 23, 2003 When emissions generated from sources in Colorado cross the State boundary line, such emissions shall not cause the air quality standards of the receiving State to be exceeded, provided reciprocal action is taken by the receiving State.

b. **Emission Monitoring Requirements**

The Division may require owners or operators of stationary air pollution sources to install, maintain, and use instrumentation to monitor and record emission data as a basis for periodic reports to the Division.

Performance Testing c.

The owner or operator of any air pollution source shall, upon request of the Division, conduct performance test(s) and furnish the Division a written report of the results of such test(s) in order to determine compliance with applicable emission control regulations. Performance test(s) shall be conducted and the data reduced in accordance with the applicable reference test methods unless the Division:

- specifies or approves, in specific cases, the use of a test method with minor changes in (i) methodology;
- approves the use of an equivalent method; (ii)
- (iii) approves the use of an alternative method the results of which the Division has determined to be adequate for indicating where a specific source is in compliance; or
- (iv) waives the requirement for performance test(s) because the owner or operator of a source has demonstrated by other means to the Division's satisfaction that the affected facility is in compliance with the standard. Nothing in this paragraph shall be construed to abrogate the Commission's or Division's authority to require testing under the Colorado Revised Statutes, Title 25, Article 7 1973, and pursuant to regulations promulgated by the Commission.

Compliance test(s) shall be conducted under such conditions as the Division shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Division such records as may be necessary to determine the conditions of the performance test(s). Operations during period of startup, shutdown, and malfunction shall not constitute representative conditions of performance test(s) unless otherwise specified in the applicable standard.

The owner or operator of an affected facility shall provide the Division thirty days prior notice of the performance test to afford the Division the opportunity to have an observer present. The Division may waive the thirty day notice requirement provided that arrangements satisfactory to the Division are made for earlier testing.

The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

- (i) Sampling ports adequate for test methods applicable to such facility,
- (ii) Safe sampling platform(s),
- (iii) Safe access to sampling platform(s).
- (iv) Utilities for sampling and testing equipment.

Operating Permit Number: 97OPDE189 Issued: January 1, 2001 Each performance test shall consist of at least three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard the arithmetic mean of results of at least three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Division's approval, be determined using the arithmetic mean of the results of the two other runs.

Nothing in this section shall abrogate the Division's authority to conduct its own performance test(s) if so warranted.

d. Upset Conditions and Breakdowns

Upset conditions, as defined, shall not be deemed to be in violation of the Colorado regulations, provided that the Division is notified as soon as possible, but no later than two (2) hours after the start of the next working day, followed by a written notice to the Division explaining the cause of the occurrence and that proper action has been or is being taken to correct the conditions causing the violation and to prevent such excess emission in the future.

e. Circumvention Clause

A person shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of air pollutants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of this regulation. No person shall circumvent this regulation by using more openings than is considered normal practice by the industry or activity in question.

(i) Compliance Certifications

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in the Colorado State Implementation Plan, nothing in the Colorado State Implementation Plan shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. Evidence that has the effect of making any relevant standard or permit term more stringent shall not be credible for proving a violation of the standard or permit term.

(ii) Affirmative Defense Provision for Excess Emissions During Startup and Shutdown

An affirmative defense is provided to owners and operators for civil penalty actions for excess emissions during periods of startup and shutdown. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of the evidence that:

- a) The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;
- b) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation or maintenance;

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- c) If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- d) The frequency and duration of operation in startup and shutdown periods were minimized to the maximum extent practicable;
- (iii) All possible steps were taken to minimize the impact of excess emissions on ambient air quality;
- (iv) All emissions monitoring systems were kept in operation (if at all possible);
- (v) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence; and,
- (vi) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This subparagraph is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement.

The owner or operator of the facility experiencing excess emissions during startup and shutdown shall notify the Division verbally as soon as possible, but no later than two (2) hours after the start of the next working day, and shall submit written quarterly notification following the initial occurrence of the excess emissions. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

The Affirmative Defense Provision does not apply to State Implementation Plan provisions or other requirements that derive from new source performance standards (NSPS) or national emissions standards for hazardous air pollutants (NESHAPS), any other federally enforceable performance standard or emission limit with an averaging time greater than twenty-four hours. In addition, an affirmative defense cannot be used by a single source or small group of sources where the excess emissions have the potential to cause an exceedance of the ambient air quality standards or Prevention of Significant Deterioration (PSD) increments.

In making any determination whether a source established an affirmative defense, the Division shall consider the information within the notification required above and any other information the Division deems necessary, which may include, but is not limited to, physical inspection of the facility and review of documentation pertaining to the maintenance and operation of process and air pollution control equipment.

4. Compliance Requirements

Regulation No. 3 and 5 CCR 1001-5, Part C, §§ III.C.9., V.C.11. & 16.d., § 25-7-122.1(2), C.R.S.

a. The permittee must comply with all conditions of the Operating Permit. Any permit noncompliance relating to federally-enforceable terms or conditions constitutes a violation of the federal act, as well as the state act and Regulation No. 3. Any permit noncompliance relating to state-only terms or conditions constitutes a violation of the state act and Regulation No. 3, shall be enforceable pursuant to state law, and shall not be enforceable by citizens under § 304 of the federal act. Any such violation of the federal act, the state act or regulations implementing either statute is grounds for enforcement action, for permit termination, revocation and reissuance or modification or for denial of a permit renewal application.

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- b. It shall not be a defense for a permittee in an enforcement action or a consideration in favor of a permittee in a permit termination, revocation or modification action or action denying a permit renewal application that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- c. The permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of any request by the permittee for a permit modification, revocation and reissuance, or termination, or any notification of planned changes or anticipated noncompliance does not stay any permit condition, except as provided in §§ X. and XI. of Regulation No. 3, Part C.
- d. The permittee shall furnish to the Air Pollution Control Division, within a reasonable time as specified by the Division, any information that the Division may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Division copies of records required to be kept by the permittee, including information claimed to be confidential. Any information subject to a claim of confidentiality shall be specifically identified and submitted separately from information not subject to the claim.
- e. Any schedule for compliance for applicable requirements with which the source is not in compliance at the time of permit issuance shall be supplemental, and shall not sanction noncompliance with, the applicable requirements on which it is based.
- f. For any compliance schedule for applicable requirements with which the source is not in compliance at the time of permit issuance, the permittee shall submit, at least every 6 months unless a more frequent period is specified in the applicable requirement or by the Air Pollution Control Division, progress reports which contain the following:
 - (i) dates for achieving the activities, milestones, or compliance required in the schedule for compliance, and dates when such activities, milestones, or compliance were achieved; and
 - (ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- g. The permittee shall not knowingly falsify, tamper with, or render inaccurate any monitoring device or method required to be maintained or followed under the terms and conditions of the Operating Permit.

5. Emergency Provisions

Regulation No. 3, 5 CCR 1001-5, Part C, § VII.

An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed the technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. "Emergency" does not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. An emergency constitutes an affirmative defense to an enforcement action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. an emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. the permitted facility was at the time being properly operated;

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- c. during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- d. the permittee submitted oral notice of the emergency to the Air Pollution Control Division no later than noon of the next working day following the emergency, and followed by written notice within one month of the time when emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

This emergency provision is in addition to any emergency or upset provision contained in any applicable requirement.

6. Emission Standards for Asbestos

Regulation No. 8, 5 CCR 1001-10, Part B

The permittee shall not conduct any asbestos abatement activities except in accordance with the provisions of Regulation No. 8, Part B, "emission standards for asbestos."

7. Emissions Trading, Marketable Permits, Economic Incentives

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.13.

No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are specifically provided for in the permit.

8. Fee Payment

C.R.S §§ 25-7-114.1(6) and 25-7-114.7

- a. The permittee shall pay an annual emissions fee in accordance with the provisions of C.R.S. § 25-7-114.7. A 1% per month late payment fee shall be assessed against any invoice amounts not paid in full on the 91st day after the date of invoice, unless a permittee has filed a timely protest to the invoice amount.
- b. The permittee shall pay a permit processing fee in accordance with the provisions of C.R.S. § 25-7-114.7. If the Division estimates that processing of the permit will take more than 30 hours, it will notify the permittee of its estimate of what the actual charges may be prior to commencing any work exceeding the 30 hour limit.
- c. The permittee shall pay an APEN fee in accordance with the provisions of C.R.S. § 25-7-114.1(6) for each APEN or revised APEN filed.

9. Fugitive Particulate Emissions

Regulation No. 1, 5 CCR 1001-3, § III.D.1.

The permittee shall employ such control measures and operating procedures as are necessary to minimize fugitive particulate emissions into the atmosphere, in accordance with the provisions of Regulation No. 1, § III.D.1.

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10. Inspection and Entry

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.16.b.

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Air Pollution Control Division, or any authorized representative, to perform the following:

- a. enter upon the permittee's premises where an Operating Permit source is located, or emissions-related activity is conducted, or where records must be kept under the terms of the permit;
- b. have access to, and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- c. inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the Operating Permit;
- d. sample or monitor at reasonable times, for the purposes of assuring compliance with the Operating Permit or applicable requirements, any substances or parameters.

11. Minor Permit Modifications

Regulation No. 3, 5 CCR 1001-5, Part C, §§ X. & XI.

The permittee shall submit an application for a minor permit modification before making the change requested in the application. The permit shield shall not extend to minor permit modifications.

12. New Source Review

Regulation No. 3, 5 CCR 1001-5, Part B

The permittee shall not commence construction or modification of a source required to be reviewed under the New Source Review provisions of Regulation No. 3, Part B, without first receiving a construction permit.

13. No Property Rights Conveyed

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.11.d.

This permit does not convey any property rights of any sort, or any exclusive privilege.

14. Odor

Regulation No. 2, 5 CCR 1001-4, Part A

As a matter of state law only, the permittee shall comply with the provisions of Regulation No. 2 concerning odorous emissions.

15. Off-Permit Changes to the Source

Regulation No. 3, 5 CCR 1001-5, Part C, § XII.B.

The permittee shall record any off-permit change to the source that causes the emissions of a regulated pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the

Operating Permit Number: 97OPDE189 Issued: January 1, 2001 Last Revised: January 23, 2003 emissions resulting from the change, including any other data necessary to show compliance with applicable ambient air quality standards. The permittee shall provide contemporaneous notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit . The permit shield shall not apply to any off-permit change.

16. Opacity

Regulation No. 1, 5 CCR 1001-3, §§ I., II.

The permittee shall comply with the opacity emissions limitation set forth in Regulation No. 1, §§ I.-II.

17. Open Burning

Regulation No. 9, 5 CCR 1001-11

The permittee shall obtain a permit from the Division for any regulated open burning activities in accordance with provisions of Regulation No. 9.

18. Ozone Depleting Compounds

Regulation No. 15, 5 CCR 1001-17

The permittee shall comply with the provisions of Regulation No. 15 concerning emissions of ozone depleting compounds.

19. Permit Expiration and Renewal

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.6., IV.C., V.C.2.

- a. The permit term shall be five (5) years. The permit shall expire at the end of its term. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted.
- b. Applications for renewal shall be submitted at least twelve months, but not more than 18 months, prior to the expiration of the Operating Permit. An application for permit renewal may address only those portions of the permit that require revision, supplementing, or deletion, incorporating the remaining permit terms by reference from the previous permit. A copy of any materials incorporated by reference must be included with the application.

20. Portable Sources

Regulation No. 3, 5 CCR 1001-5, Part C, § II.D.

Portable Source permittees shall notify the Air Pollution Control Division at least 10 days in advance of each change in location.

21. Prompt Deviation Reporting

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.7.b.

The permittee shall promptly report any deviation from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions

Operating Permit Number: 97OPDE189 Issued: January 1, 2001 Last Revised: January 23, 2003 or preventive measures taken. Unless required by a permit term or condition to report deviations on a more frequent basis, "prompt" reporting shall entail submission of reports of deviations from permit requirements every six (6) months in accordance with paragraph 21.d. below. "Prompt reporting" does not constitute an exception to the requirements of "Emergency Provisions" for the purpose of avoiding enforcement actions.

22. Record Keeping and Reporting Requirements

Regulation No. 3, 5 CCR 1001-5, Part A, § II.; Part C, §§ V.C.6., V.C.7.

- a. Unless otherwise provided in the source specific conditions of this Operating Permit, the permittee shall maintain compliance monitoring records that include the following information:
 - (i) date, place as defined in the Operating Permit, and time of sampling or measurements;
 - (ii) date(s) on which analyses were performed;
 - (iii) the company or entity that performed the analysis;
 - (iv) the analytical techniques or methods used;
 - (v) the results of such analysis; and
 - (vi) the operating conditions at the time of sampling or measurement.
- b. The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application. Support information, for this purpose, includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Operating Permit. With prior approval of the Air Pollution Control Division, the permittee may maintain any of the above records in a computerized form.
- c. Permittees must retain records of all required monitoring data and support information for the most recent twelve (12) month period, as well as compliance certifications for the past five (5) years on-site at all times. A permittee shall make available for the Air Pollution Control Division's review all other records of required monitoring data and support information required to be retained by the permittee upon 48 hours advance notice by the Division.
- d. The permittee shall submit to the Air Pollution Control Division all reports of any required monitoring at least every six (6) months, unless an applicable requirement, the enhanced monitoring rule, or the Division requires submission on a more frequent basis. All instances of deviations from any permit requirements must be clearly identified in such reports.
- e. The permittee shall file an Air Pollutant Emissions Notice ("APEN") prior to constructing, modifying, or altering any facility, process, activity which constitutes a stationary source from which air pollutants are or are to be emitted, unless such source is exempt from the APEN filing requirements of Regulation No. 3, Part A, § II.D. A revised APEN shall be filed annually whenever a significant change in emissions, as defined in Regulation No. 3, Part A, § II.C.2., occurs; whenever there is a change in owner or operator of any facility, process, or activity; whenever new control equipment is installed; whenever a different type of control equipment replaces an existing type of control equipment; whenever a permit limitation must be modified; or before the APEN expires. An APEN is valid for a period of five years. The five-year period recommences when a revised APEN is received by the Air Pollution Control Division. Revised APENs shall be submitted no later than 30 days before the five-year term expires. Permittees submitting revised APENs to inform the Division of a change in actual emission rates must do so by April 30 of the following year. Where a permit revision

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is required, the revised APEN must be filed along with a request for permit revision. APENs for changes in control equipment must be submitted before the change occurs. Annual fees are based on the most recent APEN on file with the Division.

23. Reopenings for Cause

Regulation No. 3, 5 CCR 1001-5, Part C, § XIII.

- a. The Air Pollution Control Division shall reopen, revise, and reissue Operating Permits; permit reopenings and reissuance shall be processed using the procedures set forth in Regulation No. 3, Part C, § III., except that proceedings to reopen and reissue permits affect only those parts of the permit for which cause to reopen exists.
- b. The Division shall reopen a permit whenever additional applicable requirements become applicable to a major source with a remaining permit term of three or more years, unless the effective date of the requirements is later than the date on which the permit expires, or unless a general permit is obtained to address the new requirements; whenever additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program; whenever the Division determines the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or whenever the Division determines that the permit must be revised or revoked to assure compliance with an applicable requirement.
- c. The Division shall provide 30 days' advance notice to the permittee of its intent to reopen the permit, except that a shorter notice may be provided in the case of an emergency.
- d. The permit shield shall extend to those parts of the permit that have been changed pursuant to the reopening and reissuance procedure.

24. Section 502(b)(10) Changes

Regulation No. 3, 5 CCR 1001-5, Part C, § XII.A.

The permittee shall provide a minimum 7-day advance notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit. The permittee shall attach a copy of each such notice given to its Operating Permit.

25. Severability Clause

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.10.

In the event of a challenge to any portion of the permit, all emissions limits, specific and general conditions, monitoring, record keeping and reporting requirements of the permit, except those being challenged, remain valid and enforceable.

26. Significant Permit Modifications

Regulation No. 3, 5 CCR 1001-5, Part C, §III.B.2.

The permittee shall not make a significant modification required to be reviewed under Regulation No. 3, Part B ("Construction Permit" requirements) without first receiving a construction permit. The permittee shall submit a complete Operating Permit application or application for an Operating Permit revision for any new or modified source within twelve months of commencing operation, to the address listed in Item 1

Operating Permit Number: 97OPDE189 Issued: January 1, 2001 Last Revised: January 23, 2003 in Appendix D of this permit. If the permittee chooses to use the "Combined Construction/Operating Permit" application procedures of Regulation No. 3, Part C, then the Operating Permit must be received prior to commencing construction of the new or modified source.

27. Special Provisions Concerning the Acid Rain Program

Regulation No. 3, 5 CCR 1001-5, Part C, §§ V.C.1.b. & 8

- a. Where an applicable requirement of the federal act is more stringent than an applicable requirement of regulations promulgated under Title IV of the federal act, 40 Code of Federal Regulations (CFR) Part 72, both provisions shall be incorporated into the permit and shall be federally enforceable.
- b. Emissions exceeding any allowances that the source lawfully holds under Title IV of the federal act or the regulations promulgated thereunder, 40 CFR Part 72, are expressly prohibited.

28. Transfer or Assignment of Ownership

Regulation No. 3, 5 CCR 1001-5, Part C, § II.C.

No transfer or assignment of ownership of the Operating Permit source will be effective unless the prospective owner or operator applies to the Air Pollution Control Division on Division-supplied Administrative Permit Amendment forms, for reissuance of the existing Operating Permit. No administrative permit shall be complete until a written agreement containing a specific date for transfer of permit, responsibility, coverage, and liability between the permittee and the prospective owner or operator has been submitted to the Division.

29. Volatile Organic Compounds

Regulation No. 7, 5 CCR 1001-9, §§ III & V.

a. For sources located in an ozone non-attainment area or the Denver Metro Attainment Maintenance Area, all storage tank gauging devices, anti-rotation devices, accesses, seals, hatches, roof drainage systems, support structures, and pressure relief valves shall be maintained and operated to prevent detectable vapor loss except when opened, actuated, or used for necessary and proper activities (e.g. maintenance). Such opening, actuation, or use shall be limited so as to minimize vapor loss.

Detectable vapor loss shall be determined visually, by touch, by presence of odor, or using a portable hydrocarbon analyzer. When an analyzer is used, detectable vapor loss means a VOC concentration exceeding 10,000 ppm. Testing shall be conducted as in Regulation No. 7, Section VIII.C.3.

Except when otherwise provided by Regulation No. 7, all volatile organic compounds, excluding petroleum liquids, transferred to any tank, container, or vehicle compartment with a capacity exceeding 212 liters (56 gallons), shall be transferred using submerged or bottom filling equipment. For top loading, the fill tube shall reach within six inches of the bottom of the tank compartment. For bottom-fill operations, the inlet shall be flush with the tank bottom.

- b. The permittee shall not dispose of volatile organic compounds by evaporation or spillage unless Reasonably Available Control Technology (RACT) is utilized.
- c. No owner or operator of a bulk gasoline terminal, bulk gasoline plant, or gasoline dispensing facility as defined in Colorado Regulation No. 7, Section VI, shall permit gasoline to be

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intentionally spilled, discarded in sewers, stored in open containers, or disposed of in any other manner that would result in evaporation.

30. Wood Stoves and Wood burning Appliances

Regulation No. 4, 5 CCR 1001-6

The permittee shall comply with the provisions of Regulation No. 4 concerning the advertisement, sale, installation, and use of wood stoves and wood burning appliances.

END OF PERMIT REQUIREMENTS

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OPERATING PERMIT APPENDICES

- **A INSPECTION INFORMATION**
- **B COMPLIANCE MONITORING REPORT FORMAT**
- **C COMPLIANCE CERTIFICATION REPORT FORMAT**
- **D-NOTIFICATION ADDRESSES**
- **E PERMIT ACRONYMS**
- F PERMIT MODIFICATIONS

*DISCLAIMER:

None of the information found in these Appendices shall be considered to be State or Federally enforceable, except as otherwise provided in the permit, and is presented to assist the source, permitting authority, inspectors, and citizens.

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APPENDIX A Inspection Information

Directions to Plant:

The Robinson Brick Company facility is located in an industrial section of south Denver, immediately west of the South Platte River at 1845 Dartmouth Avenue. Santa Fe Blvd. is ½ mile to the east, and Federal Blvd. is approximately 1 mile to the west.

Safety Equipment Required:

Eye Protection, Hard Hat, Sturdy Leather Shoes, and Hearing Protection

Facility Plot Plan:

Figure 1 (following page) shows the plot plan as submitted on August 6, 1997 with the source's Title V Operating Permit Application.

List of Insignificant Activities:

The following list of insignificant activities was provided by the source to assist in the understanding of the facility layout. Since there is no requirement to update such a list, activities may have changed since the last filing.

Insignificant activities and/or sources of emissions as submitted in the application are as follows:

In-house analytical laboratory used for QA/QC of finished brick products

Commercial heating units, < 10 MMBtu/hr each

Two (2) Diesel fuel tanks (6,000 gallons and 5,000 gallons)

Landscaping equipment

Forklifts

Storage of lubricating oils

Janitorial activities

Architectural painting

Welding operations

Air conditioning and ventilating systems

Calciner material handling

Reclaim conveyors

Clean-up vacuum

Gasoline pump and tank

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APPENDIX B Monitoring and Permit Deviation Reporting

with codes ver 2/1/01

Reporting Requirements and Definitions

Please note that, pursuant to 113(c)(2) of the federal Clean Air Act, any person who knowingly:

- (A) makes any false material statement, representation, or certification in, or omits material information from, or knowingly alters, conceals, or fails to file or maintain any notice, application, record, report, plan, or other document required pursuant to the Act to be either filed or maintained (whether with respect to the requirements imposed by the Administrator or by a State);
- (B) fails to notify or report as required under the Act; or
- (C) falsifies, tampers with, renders inaccurate, or fails to install any monitoring device or method required to be maintained or followed under the Act shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not more than 2 years, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment.

The permittee must comply with all conditions of this operating permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

The Part 70 Operating Permit program requires three types of reports to be filed for all permits. All required reports must be certified by a responsible official.

Report #1: Monitoring Deviation Report (due at least every six months)

For purposes of this operating permit, the Division is requiring that the monitoring reports are due every six months unless otherwise noted in the permit. All instances of deviations from permit monitoring requirements must be clearly identified in such reports.

For purposes of this operating permit, monitoring means any condition determined by observation, by data from any monitoring protocol, or by any other monitoring which is required by the permit as well as the record keeping associated with that monitoring. This would include, for example, fuel use or process rate monitoring, fuel analyses, and operational or control device parameter monitoring.

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Report #2: Permit Deviation Report (must be reported "promptly")

In addition to the monitoring requirements set forth in the permits as discussed above, each and every requirement of the permit is subject to deviation reporting. The reports must address deviations from permit requirements, including those attributable to upset conditions and malfunctions as defined in this Appendix, the probable cause of such deviations, and any corrective actions or preventive measures taken. All deviations from any term or condition of the permit are required to be summarized or referenced in the annual compliance certification.

For purposes of this operating permit, "upset" shall refer to both emergency conditions and upsets. Additional discussion on these conditions is provided later in this Appendix.

For purposes of this operating permit, the Division is requiring that the permit deviation reports are due every six months unless otherwise noted in the permit. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. For example, quarterly Excess Emission Reports required by an NSPS or Regulation No. 1, Section IV.

In addition to the monitoring deviations discussed above, included in the meaning of deviation for the purposes of this operating permit are any of the following:

- (1) A situation where emissions exceed an emission limitation or standard contained in the permit;
- (2) A situation where process or control device parameter values demonstrate that an emission limitation or standard contained in the permit has not been met;
- (3) A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit; or,
- (4) A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only if the emission point is subject to CAM)

For reporting purposes, the Division has combined the Monitoring Deviation Report with the Permit Deviation Report. All deviations shall be reported using the following codes:

1 = Standard: When the requirement is an emission limit or standard 2 = Process: When the requirement is a production/process limit

3 = Monitor: When the requirement is monitoring
 4 = Test: When the requirement is testing

5 = Maintenance: When required maintenance is not performed **6 = Record:** When the requirement is record keeping

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7 = Report: When the requirement is reporting

8 = CAM: A situation in which an excursion or exceedance as defined in 40CFR Part 64

(the Compliance Assurance Monitoring (CAM) Rule) has occurred.

9 = Other: When the deviation is not covered by any of the above categories

Report #3: Compliance Certification (annually, as defined in the permit)

Submission of compliance certifications with terms and conditions in the permit, including emission limitations, standards, or work practices, is required not less than annually.

Compliance Certifications are intended to state the compliance status of each requirement of the permit over the certification period. They must be based, at a minimum, on the testing and monitoring methods specified in the permit that were conducted during the relevant time period. In addition, if the owner or operator knows of other material information (i.e. information beyond required monitoring that has been specifically assessed in relation to how the information potentially affects compliance status), that information must be identified and addressed in the compliance certification. The compliance certification must include the following:

- The identification of each term or condition of the permit that is the basis of the certification;
- The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each permit term and condition during the certification period and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the methods and means required in the permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Clean Air Act, which prohibits knowingly making a false certification or omitting material information;
- The status of compliance with the terms and conditions of the permit, and whether compliance was continuous or intermittent. The certification shall identify each deviation and take it into account in the compliance certification. Note that not all deviations are considered violations.¹
- Such other facts as the Division may require, consistent with the applicable requirements to which the source is subject, to determine the compliance status of the source.

The Certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only for emission points subject to CAM)

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Note the requirement that the certification shall identify each deviation and take it into account in the compliance certification. Previously submitted deviation reports, including the deviation report submitted at the time of the annual certification, may be referenced in the compliance certification.

1 For example, given the various emissions limitations and monitoring requirements to which a source may be subject, a deviation from one requirement may not be a deviation under another requirement which recognizes an exception and/or special circumstances relating to that same event. Further, periods of excess emissions during startup, shutdown and malfunction may not be found to be a violation of an emission limitation or standard where the source adequately shows that any potential deviations as a result of these infrequent periods were minimized to the extent practicable and could not have been prevented through careful planning, design, or were unavoidable to prevent loss of life, personal injury, or severe property damage.

Startup, Shutdown, Malfunctions, Emergencies, and Upsets

Understanding the application of Startup, Shutdown, Malfunctions, Emergency provisions, and the Upset provisions is very important in both the deviation reports and the annual compliance certifications.

Startup, Shutdown, and Malfunctions

Please note that exceedances of some New Source Performance Standards (NSPS) and Maximum Achievable Control Technology (MACT) standards that occur during Startup, Shutdown or Malfunctions may not be considered to be non-compliance since emission limits or standards often do not apply unless specifically stated in the NSPS. Such exceedances must, however, be reported as excess emissions per the NSPS/MACT rules and would still be noted in the deviation report. In regard to compliance certifications, the permittee should be confident of the information related to those deviations when making compliance determinations since they are subject to Division review. The concepts of Startup, Shutdown and Malfunctions also exist for Best Available Control Technology (BACT) sources, but are not applied in the same fashion as for NSPS and MACT sources.

Emergencies and Upsets

Under the Emergency provisions of Part 70 and the Upset provisions of the State regulations, certain operational conditions may act as an affirmative defense against enforcement action if they are properly reported.

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DEFINITIONS

Malfunction (NSPS) means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions

Malfunction (SIP) means any sudden and unavoidable failure of air pollution control equipment or process equipment or unintended failure of a process to operate in a normal or usual manner. Failures that are primarily caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

Emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

Upset means an unpredictable failure of air pollution control or process equipment which results in the violation of emission control regulations and which is not due to poor maintenance, improper or careless operations, or is otherwise preventable through exercise of reasonable care.

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Monitoring and Permit Deviation Report - Part I

- 1. Following is the **required** format for the Monitoring and Permit Deviation report to be submitted to the Division on a semi-annual basis unless otherwise noted in the permit. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.
- 2. Part II of this Appendix B shows the format and information the Division will require for describing periods of monitoring and permit deviations, or upset or emergency conditions as indicated in the Table below. One Part II Form must be completed for each Deviation. Previously submitted reports (e.g. EER's or Upsets) may be referenced and the form need not be filled out in its entirety.

FACILITY NAME:	Robinson Brick Company
OPERATING PERMIT NO:	97OPDE189
REPORTING PERIOD:	(see first page of the permit for specific reporting period and dates)

Operating Permit Unit		Deviatio During l	ns noted Period? ¹	Deviation Code ²	Upset/Emerge Reported Du	
ID	Unit Description	YES	NO		YES	NO
F001, F005	Fugitive Particulate Emissions From Loader to Feeder, Storage Piles and Unpaved Roads.					
F002	Primary Crusher, Design Rated at 90 dry tons/hr.					
F003	Grinding and Screening Operations Located in an Enclosed Building, Design Rated at 90 dry tons/hr.					
F004	Partially Enclosed Conveyor, Design Rated at 90 dry tons/hr.					
S001	Rotary Dryer, Maximum Design Rate 20 MMBtu/hr with Wet Dust Collector, Natural Gas Fired.					
S002-S005	Two Tunnel Dryers and Two Kilns					
S006	Rotary Calciner with wet dust collector.					
General Conditions						
Insignificant Activities						

¹ See previous discussion regarding what is considered to be a deviation. Determination of whether or not a deviation has occurred shall be based on a reasonable inquiry using readily available information.

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²Use the following entries, as appropriate.

1 = Standard: When the requirement is an emission limit or standard
2 = Process: When the requirement is a production/process limit

3 = Monitor: When the requirement is monitoring 4 = Test: When the requirement is testing

5 = Maintenance: When required maintenance is not performed
 6 = Record: When the requirement is record keeping
 7 = Report: When the requirement is reporting

8 = CAM: A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the

Compliance Assurance Monitoring (CAM) Rule) has occurred.

9 = Other: When the deviation is not covered by any of the above categories

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Monitoring and Permit Deviation Report - Part II

FACILITY NAME: [Company Nam OPERATING PERMIT NO: [Permit # REPORTING PERIOD:	e] - [Facility Name]						
Is the deviation being claimed as an:	Emergency	Upset	N/A				
(For NSPS/MACT) Did the deviation occur de	uring: Startup Malfunction	Shuto Normal Ope	down				
OPERATING PERMIT UNIT IDENTIFICAT	TION:						
Operating Permit Condition Number Citation							
Explanation of Period of Deviation	Explanation of Period of Deviation						
Duration (start/stop date & time)							
Action Taken to Correct the Problem							
Measures Taken to Prevent a Reoccurrence of	the Problem						
Dates of Upsets/Emergencies Reported (if app	olicable)						
Deviation Code	Division Code	QA:					

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SEE EXAMPLE ON THE NEXT PAGE

EXAMPLE

FACILITY NAME: OPERATING PERMIT NO: REPORTING PERIOD:		5		
KLI OKTIIVO I EKIOD.	1/1/70 - 0/30/70	,		
Is the deviation being claimed	l as an:	Emergency	Upset XX	N/A
(For NSPS/MACT) Did the d	eviation occur d	uring: Startup Malfunction	Shu Normal Ope	tdown
OPERATING PERMIT UNI	ΓIDENTIFICA	ΓΙΟN:		
Asphalt Plant with a Scrubbe	r for Particulate	Control - Unit XXX	ζ	
Operating Permit Condition N	Number Citation			
Section II, Condition 3.1 - Op	pacity Limitation	ı		
Explanation of Period of Dev	<u>iation</u>			
Slurry Line Feed Plugged				
<u>Duration</u>				
START- 1730 4/10/96 END- 1800 4/10/96				
Action Taken to Correct the I	<u>Problem</u>			
Line Blown Out				
Measures Taken to Prevent R	eoccurrence of t	he Problem		
Replaced Line Filter				
Dates of Upsets/Emergencies	Reported (if app	olicable)		
4/10/96 to S. Busch, APCD				
Deviation Code		Division Co	de QA:	

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Monitoring and Permit Deviation Report - Part III

REPORT CERTIFICATION

SOURCE NAME:	Robinson Brick Company
FACILITY IDENTIFICATION NUM	BER: 0311447
PERMIT NUMBER:	97OPDE189
REPORTING PERIOD	(see first page of the permit for specific reporting period and dates)
	Annual Deviation Reports must be certified by a responsible ation No. 3, Part A, Section I.B.54. This signed certification documents being submitted.
STATEMENT OF COMPLETENE	CSS
	ng submitted in its entirety and, based on information and ry, I certify that the statements and information contained and complete.
Section 18-1-501(6), C.R.S., makes at	es state that any person who knowingly, as defined in Subny false material statement, representation, or certification demeanor and may be punished in accordance with the 1, C.R.S.
Printed or Typed Name	e Title
Signature of Responsible	Official Date Signed
Note: Deviation reports shall be submitted copies need be sent to the U.S. EPA.	to the Division at the address given in Appendix D of this permit. No

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APPENDIX C Required Format for Annual Compliance Certification Reports

Following is the format for the Compliance Certification report to be submitted to the Division and the U.S. EPA annually based on the effective date of the permit. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.

FACILITY NAME:	Robinson Brick Company
OPERATING PERMIT NO:	97DE189
REPORTING PERIOD:	
I. Facility Status	
0 1 01	od, this source was in compliance with ALL terms and conditions contained in the which is identified and included by this reference. The method(s) used to determine crified in the Permit.
terms and conditions contained in treference, during the entire reporting	the deviations identified in the table below, this source was in compliance with all the Permit, each term and condition of which is identified and included by this g period. The method used to determine compliance for each term and condition is unless otherwise indicated and described in the deviation report(s). Note that not all the deviation report(s) is the deviation of the deviation report(s).

Operating Permit Unit ID	Unit Description	Deviations Reported ¹		Monitoring Method per Permit? ²		Was compliance continuous or intermittent? ³		Was Data Continuous? ⁴	
ID		Previous	Current	Yes	No	Continuous	Intermittent	Yes	No
F001, F005	Fugitive Particulate Emissions From Loader to Feeder, Storage Piles and Unpaved Roads.								
F002	Primary Crusher, Design Rated at 90 dry tons/hr.								
F003	Grinding and Screening Operations Located in an Enclosed Building, Design Rated at 90 dry tons/hr.								
F004	Partially Enclosed Conveyor, Design Rated at 90 dry tons/hr.								
S001	Rotary Dryer, Maximum Design Rate 20 MMBtu/hr with Wet Dust								

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Operating Permit Unit	Unit Description	Devia Repoi		Monit Metho Pern	od per		nce continuous mittent? ³	Was :	
ID		Previous	Current	Yes	No	Continuous	Intermittent	Yes	No
	Collector, Natural Gas Fired.								
S002-S005	Two Tunnel Dryers and Two Kilns								
S006	Rotary Calciner with wet dust collector.								
General Conditions ⁵									
Insignificant Activities ⁵									

¹ If deviations were noted in the previous deviation report (i.e. for the first six months of the annual reporting period), put an "X" under "previous". If deviations were noted in the current deviation report (i.e. for the last six months of the annual reporting period), put an "X" under "current". Mark both columns if both apply.

NOTE:

The Periodic Monitoring requirements of the Operating Permit program rule are intended to provide assurance that even in the absence of a continuous system of monitoring the Title V source can demonstrate whether it has operated in continuous compliance for the duration of the reporting period. Therefore, if a source 1) conducts all of the monitoring and record keeping required in its permit, even if such activities are done periodically and not continuously, and if 2) such monitoring and record keeping does not indicate non-compliance, and if 3) the Responsible Official is not aware of any credible evidence that indicates non-compliance, then the Responsible Official can certify that the emission point(s) in question were in continuous compliance during the applicable time period.

П.	Status	s for Accidental Release P	Prevention Program:	
	A.			is not subject to the provisions of the (Section 112(r) of the Federal Clean Air Act)

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² Note whether the method(s) used to determine the compliance status with each term and condition was the method(s) specified in the permit. If it was not, mark "no" and attach additional information/explanation.

³ Note whether the compliance status with of each term and condition provided was continuous or intermittent. "Intermittent Compliance" can mean either that noncompliance has occurred or that the owner or operator has data sufficient to certify compliance only on an intermittent basis. Certification of intermittent compliance therefore does not necessarily mean that any noncompliance has occurred.

⁴Note whether the method(s) used to determine the compliance status with each term and condition provided continuous or intermittent data.

⁵ Compliance status for these sources shall be based on a reasonable inquiry using readily available information.

		ements of section 112(r).	15	IS HO	t in compliance with all the
	1.				
Certifi	cation				
easona ation a note th b), C.R ent is g	able indexare tructured the Constitution of th	quiry, I certify that the se, accurate and complete. Colorado Statutes state thankes any false material state in a misdemeanor and may	tatements at any perso tement, rep	and inform on who know presentation	ation contained in this vingly, as defined in §18- , or certification in this
	Printe	d or Typed Name		Т	itle
	S	ignature		Date	Signed
	review easona ation a note th o), C.R ent is g	Certification reviewed this easonable incation are tructor attention are tructor of the control	1. A Risk Management Plan the appropriate authority required date. Certification reviewed this certification in its entirety easonable inquiry, I certify that the sation are true, accurate and complete. note that the Colorado Statutes state that so, C.R.S., makes any false material statent is guilty of a misdemeanor and may 7 122.1, C.R.S. Printed or Typed Name Signature	1. A Risk Management Plan	1. A Risk Management Plan will be the appropriate authority and/or the designated required date. Certification reviewed this certification in its entirety and, based on inform easonable inquiry, I certify that the statements and inform ation are true, accurate and complete. note that the Colorado Statutes state that any person who know o), C.R.S., makes any false material statement, representation ent is guilty of a misdemeanor and may be punished in accordance to Typed Name Printed or Typed Name T

NOTE: All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit.

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APPENDIX D Notification Addresses

1. **Air Pollution Control Division**

Colorado Department of Public Health and Environment Air Pollution Control Division Operating Permits Unit APCD-SS-B1 4300 Cherry Creek Drive S. Denver, CO 80246-1530

ATTN: Jim King

2. United States Environmental Protection Agency

Compliance Notifications:

Office of Enforcement, Compliance and Environmental Justice Mail Code 8ENF-T U.S. Environmental Protection Agency, Region VIII 999 18th Street, Suite 300 Denver, CO 80202-2466

Permit Modifications, Off Permit Changes:

Office of Pollution Prevention, State and Tribal Programs Air Program, 8P2-A U.S. Environmental Protection Agency, Region VIII 999 18th Street, Suite 300 Denver, CO 80202-2466

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APPENDIX E Permit Acronyms

Listed Alphabetically:

NSPS -

P -

PE -

AIRS -	Aerometric Information Retrieval System
AP-42 -	EPA Document Compiling Air Pollutant Emission Factors
APEN -	Air Pollution Emission Notice (State of Colorado)
APCD -	Air Pollution Control Division (State of Colorado)
ASTM -	American Society for Testing and Materials
BACT -	Best Available Control Technology
BTU -	British Thermal Unit
CAA -	Clean Air Act (CAAA = Clean Air Act Amendments)
CCR -	Colorado Code of Regulations
CEM -	Continuous Emissions Monitor
CF -	Cubic Feet (SCF = Standard Cubic Feet)
CFR -	Code of Federal Regulations
CO -	Carbon Monoxide
COM -	Continuous Opacity Monitor
CRS -	Colorado Revised Statute
EF -	Emission Factor
EPA -	Environmental Protection Agency
FI -	Fuel Input Rate in Lbs/mmBtu
FR -	Federal Register
G -	Grams
Gal -	Gallon
GPM -	Gallons per Minute
HAPs -	Hazardous Air Pollutants
HP -	Horsepower
HP-HR -	Horsepower Hour (G/HP-HR = Grams per Horsepower Hour)
LAER -	Lowest Achievable Emission Rate
LBS -	Pounds
M -	Thousand
MM -	Million
MMscf -	Million Standard Cubic Feet
MMscfd -	Million Standard Cubic Feet per Day
N/A or NA -	Not Applicable
NOx -	Nitrogen Oxides
NESHAP -	National Emission Standards for Hazardous Air Pollutants

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New Source Performance Standards

Process Weight Rate in Tons/Hr

Particulate Emissions

PM -	Particulate Matter
PM_{10} -	Particulate Matter Under 10 Microns
PSD -	Prevention of Significant Deterioration
PTE -	Potential To Emit
RACT -	Reasonably Available Control Technology
SCC -	Source Classification Code
SCF -	Standard Cubic Feet
SIC -	Standard Industrial Classification
SO_2 -	Sulfur Dioxide
TPY -	Tons Per Year
TSP -	Total Suspended Particulate
VOC -	Volatile Organic Compounds

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APPENDIX F Permit Modifications

DATE OF REVISION	TYPE OF REVISION	SECTION NUMBER, CONDITION NUMBER	DESCRIPTION OF REVISION
December 9, 2002	Administrative Amendment	Section II, Summary Table 6 and Condition 6.3	Correct short term particulate emission limit and clarify applicability
		Cover Page	Add note of when reports are due
		Section I	Update wording to current standard wording
		Section III, Condition 1	Update language to current standard language
		Section IV	Update General Conditions to current standard version
		Appendix B & C	Update to current standard version
January 23, 2003	Administrative Amendment	Section II, Condition 6.3	Correct short term particulate emission limit value in Condition 6.3 which was not corrected during previous correction for undetermined reasons.

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APPENDIX G Fugitive Dust Example Calculations From Title V Application

A. Calculations for Unit Identification Codes F001, F002, F003, F004 (Material Transfer Points)

Example: For PM emissions from Unit F001 From AP-42 Section 13.2.4 [1/95] Sand and Gravel Processing

Emission factor (lb/ton) = k (0.0032) $[(U/5)^{1.3} / (M/2)^{1.4}]$

where

k = 0.74 (for PM_{30})

U = mean speed (10 mph)

M = material moisture content (10% on average)

Estimated annual PM emission rate =

 $(0.74) (0.0032)[(10/5)^{1.3} / (10/2)^{1.4}]$ lb PM/ton sand and clay x 240,000 tons sand and clay/yr = 146.9 lb/yr = 0.1 TPY PM

Potential PM emission rate =

 $(0.74)(0.0032)[(10/5)^{1.3}/(10/2)^{1.4}]$ lb PM/ton sand and clay x 352,000 tpy clay and sand = 215.4 lb/yr = 0.1 TPY PM

PM10 emissions are assumed to be 35 percent of PM emissions.

B. Calculations for Unit F005 (Storage piles and Windblown dust)

Example: For PM emissions from Unit F005

From AP-42 Section 8.19.1 [5/83] Sand and Gravel Processing

Emission factor = 10.4 lb/acre/day (for active storage piles)

Annual Emission Rate =

(10.4 lb/acre/day) (9acres active at any time) (365 days/yr) /2000 lb/ton = 17.1 TPY PM

PM10 emissions assumed to be 35 percent of PM emissions

C. Calculations for Unit F005 (Unpaved Road Travel)

Example: For PM emissions from Unit F012

From AP-42 Section 11.2.1-2 [5/83] Miscellaneous – Unpaved Roads

Emission Factor (lb/VMT) = $k(5.9)(s/12)(S/30)(W/3)^{0.7} (w/4)^{0.5} (365-p)/365$

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Where

k = particle size multiplier (dimensionless)

s = silt content of road surface material (%)

S = mean vehicle speed, mph

W = mean vehicle weight, tons

w = number of wheels

p = number of days with at least 0.01 inches of precipitation per year

Annual PM emission rate =

 $(0.80)(5.9)(12\%/12)(10 \text{ mph/}30)(40 \text{ tons/}3)^{0.7} (18 \text{ wheels/}4)^{0.5} ((365 - 90 \text{ days})/365)(6461 \text{ WMT/hr})/2000 \text{ lb/ton } (1 - 50\%/100\% \text{ control due to watering}) = 15.6 \text{ TPY PM}$

Potential emissions at 10,300 VMT/yr = 24.9 TPY

PM10 emissions are assumed to be 35 percent of PM emissions

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APPENDIX H

Selected Sections of NSPS Subpart A

§ 60.1	Applicability	
§ 60.2	Definitions	
§ 60.5	Determination of construction or modification	
§ 60.6	Review of plans	
§ 60.7	Notification and record keeping	
§ 60.8	Performance tests	
§ 60.9	Availability of information	
§ 60.10	State authority	
§ 60.11	Compliance with standards and maintenance requirements	
§ 60.12 Circumvention		
§ 60.13	Monitoring requirements	
§ 60.14	Modification	
§ 60.15	Reconstruction	
§ 60.19	General notification and reporting requirements	
§ 60.67	2 Standard for Particulate Matter	
§ 60.67	4 Monitoring of operations	
§ 60.67	5 Test methods and procedures	
§ 60.67	6 Reporting and record keeping	

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